

<b>Interview Summary</b>	Application No.	Applicant(s)	
	10/689,899	STEVENS, KENNETH A.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

All participants (applicant, applicant's representative, PTO personnel):

(1) Thomas A. Morrison.

(3) Richard Lazarus (Reg. No. 48,215).

(2) David Bollinger.

(4) \_\_\_\_\_.

Date of Interview: 30 November 2005.

Type: a) ☐ Telephonic b) ☐ Video Conference  
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: U.S. Patent Publication No. 2002/0014736 and U.S. Patent No. 4,928,944 (Golicz).

Agreement with respect to the claims f) ☒ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent and Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:


- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr. Lazarus (applicant's representative) provided proposed amendments to claim 1 (copy attached) and explained how claim 1 defines over the combination of U.S. Patent Publication No. 2002/0014736 and the Golicz patent. Specifically, Mr. Lazarus argued that the prior art of record does not disclose or suggest upper edge paper guides for maintaining upper edges of advancing sheets in the stack and separating advancing sheets thereof so that the lead sheet is maintained at minimized pressure, as claimed in the proposed amendment. The parties reached an agreement that the minimized pressure function of the upper edge paper guides appears to define over the prior art of record, subject to further search and consideration. Mr. Lazarus also pointed out that the numbered paragraph [0035] of the instant application explains such function. A copy of numbered paragraph [0035] is attached. In addition, Mr. Lazarus pointed out section 2173.05(g) of the MPEP to support his position that the functional limitations of the upper edge paper guides can be relied upon to define over the prior art of record. See attached copy of section 2173.05(g) of the MPEP.

  
DONALD P. VALS  
SUPERVISORY PATENT EXAMINER  
TECHNICAL CENTER 3600

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. *(Currently Amended)* A sheet feeding apparatus comprising:

a sheet feeder having a feed table for maintaining edgewise thereon a stack of sheets, the sheet feeder including stack advancing creeper belts for advancing the stack toward a feeding end thereof, upper edge paper guides for maintaining upper edges of advancing sheets in the stack and separating advancing sheets thereof <sup>so that the lead sheet is maintained</sup> at minimized pressure, a singulator apparatus drawing each sequential lead sheet sheets from the stack through a singulator aperture thereof, said creeper belts and singulator apparatus being synchronously driven in a sheet advancing direction and in a reverse direction, and a controlled sheet path gap assembly receiving sheets from the singulator apparatus including a plurality of transport ramps for directing sheets through a controlled gap;

a transport receiving sheets from said control lead sheet path gap for transporting sheets to a downstream device or holding sheets to form a set before transporting to a downstream device, said transport including a second sheet receiving input independent of receipt from said controlled sheet path gap assembly for inputting thereat sheets from one or more additional sheet feeding devices.

2. *(Withdrawn)* A dual sheet handling system comprising: a sheet transport apparatus having a first sheet receiving input arranged with a singulator of a sheet feeder for delivering sheets from a stack of sheets held generally vertically by said sheet feeder; said transport including an auxiliary second sheet input for receiving sheets from a second sheet feeder; and, the first and second sheet inputs being selectively operable to receive one or more sheets from either said first or second sheet feeder, and said transport having an output for moving sheets therefrom to a subsequent downstream processing device.

3. *(Withdrawn)* The system as claimed in claim 2 wherein the second input is arranged with a manually loadable feed tray.

4. *(Withdrawn)* The system as claimed in claim 2 wherein the second input is associated with a universal friction feeder.

[0034] A tilt back feature is disclosed (FIGS. 6, 17 and 18) that allows the feeder (50) to be tilted away from the transport (31) area for error recovery, adjustments, servicing and replacement of the singulator assembly (34). In the tilt back embodiment of the disclosure the feeder (50) is physically mounted to the transport (31) via two hinge points (57) allowing access to the transport area (31). This feature enables the feeder (50) to be lifted with a loaded stack of paper and facilitated by way of two gas springs (58) located within the feeder (50) generally at behind vertical deck (21)(FIG. 13) calibrated to be effective over a range from fully loaded to empty. By means of the positioning side guides (22 and 29), spring loaded guides (59) and transport ramps (60), and transport feeder input (49), the feeder (50) can be returned to its home position (FIG. 5) without disturbing the original set up conditions of the paper stack.

→ [0035] An upper edge guide assembly (FIG. 7) is disclosed and comprises two telescoping positioning brackets (64) supporting a plurality of support wedges (33) for retaining the paper stack (36) in a vertical position. The two telescoping positioning brackets (64) are mounted to the vertical deck (21) via engagement to one of the rods (65) of a vertically adjustable mounting assembly (20). The telescoping positioning brackets (64) are used to horizontally adjust the support wedges (33) having sheet edge-contacting arcing wedge-like surfaces 33', which mount to the telescoping positioning brackets (64) via a common mounting shaft (65'). The support wedges (33) are independently mounted and are positional for adjustment of the arcing surfaces 33' to the paper stack (36). The vertical mounting assembly (20) provides, in the exemplary embodiment, two mounting positions (rods (65')) for convenient relocation of the support wedges (33) and telescoping positioning brackets (33 and 64) for alternate use with, for example, 11" and 14" documents. Actual separation and paper stack support are accomplished via two flexible spring like fingers (66 and 67) mounted directly to each support wedge (33) adjacent the bottom of wedge-like surfaces (33'). The finger (66) is a primary finger and is semi-flexible in order to hold back the paper stack (36) and the finger (67) is a secondary finger and is more flexible creating "minimal pressure" on the lead document (40) while keeping it captured. The weight of the paper stack (36) is mainly supported by the surface (33') and sheets close to the front of the stack (36) are supported by the primary finger (66) on each support wedge. As each paper (sheet) is drawn into the singulator (34), the next page (sheet) in the stack is pulled down and under the primary finger (66) until it rests between the paper stack (36) and the secondary finger (67). By means of pivoting the support wedges (33) and thereby the surfaces 33' into or away from the paper stack (36), the amount of drag can be minimized. At that point the lead document (sheet) (40) is captured between the paper stack (36) and the secondary flexible finger (67) ready to be fed to the singulator (34). This process achieves separating the next page to be fed and releasing a majority of the drag or friction caused by the weight of the paper stack (36) prior to being driven or drawn into the singulator (34) by the feed belts (26).

[0036] The input tray option (at 51) allows the operator to automatically process re-work pieces. By putting the high capacity sheet feeder in a manual mode the operator can hand feed documents in the tray and process through the inserter. The alternate of a low volume feeder attachment allows for accumulating small amounts of reworked documents to be loaded and automatically fed to the staging area of the high capacity sheet feeder (50). The sheet feeder (50) can accept other high capacity sheet feeders in tandem. Each feeder would process documents and transport to the next up-stream feeder. The pages can be processed separately or combined with other tandem feeders outputs for merging and matching functions.

construction which should not necessarily be rejected as improper or confusing under 35 U.S.C. 112, second paragraph. For example, claims which read: "The product produced by the method of claim 1." or "A method of producing ethanol comprising contacting amylose with the culture of claim 1 under the following conditions ...." are not indefinite under 35 U.S.C. 112, second paragraph, merely because of the reference to another claim. See also *Ex parte Porter*, 25 USPQ2d 1144 (Bd. Pat. App. & Inter. 1992) where reference to "the nozzle of claim 7" in a method claim was held to comply with 35 U.S.C. 112, second paragraph. However, where the format of making reference to limitations recited in another claim results in confusion, then a rejection would be proper under 35 U.S.C. 112, second paragraph.

### 2173.05(g) Functional Limitations

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. Whether or not the functional limitation complies with 35 U.S.C. 112, second paragraph, is a different issue from whether the limitation is properly supported under 35 U.S.C. 112, first paragraph, or is distinguished over the prior art. A few examples are set forth below to illustrate situations where the issue of whether a functional limitation complies with 35 U.S.C. 112, second paragraph, was considered.

It was held that the limitation used to define a radical on a chemical compound as "incapable of forming a dye with said oxidizing developing agent" although functional, was perfectly acceptable because it set definite boundaries on the patent protection sought. *In re Barr*, 444 F.2d 588, 170 USPQ 33 (CCPA 1971).

In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as "members adapted to be positioned" and "portions . . . being resiliently dilatable whereby said housing may be slidably positioned" serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. *In re Venezia*, 530 F.2d 956, 189 USPQ 149 (CCPA 1976).

### 2173.05(h) Alternative Limitations

#### I. MARKUSH GROUPS

Alternative expressions are permitted if they present no uncertainty or ambiguity with respect to the question of scope or clarity of the claims. One acceptable form of alternative expression, which is commonly referred to as a Markush group, recites members as being "selected from the group consisting of A, B and C." See *Ex parte Markush*, 1925 C.D. 126 (Comm'r Pat. 1925).

*Ex parte Markush* sanctions claiming a genus expressed as a group consisting of certain specified materials. Inventions in metallurgy, refractories, ceramics, pharmacy, pharmacology and biology are most frequently claimed under the Markush formula but purely mechanical features or process steps may also be claimed by using the Markush style of claiming. See *Ex parte Head*, 214 USPQ 551 (Bd. App. 1981); *In re Gaubert*, 524 F.2d 1222, 187 USPQ 664 (CCPA 1975); and *In re Harnisch*, 631 F.2d 716, 206 USPQ 300 (CCPA 1980). It is improper to use the term "comprising" instead of "consisting of." *Ex parte Dotter*, 12 USPQ 382 (Bd. App. 1931).

The use of Markush claims of diminishing scope should not, in itself, be considered a sufficient basis for objection to or rejection of claims. However, if such a practice renders the claims indefinite or if it results in undue multiplicity, an appropriate rejection should be made.

Similarly, the double inclusion of an element by members of a Markush group is not, in itself, sufficient basis for objection to or rejection of claims. Rather, the facts in each case must be evaluated to determine whether or not the multiple inclusion of one or more elements in a claim renders that claim indefinite. The mere fact that a compound may be embraced by more than one member of a Markush

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